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<210> 2
<211> 318
<212> PRT
<213> Homo sapiens
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35 40 45

Pro Pro Ala Gly His Ser Gly Pro Gly Pro Ala Gly Phe Pro Val Pro  
50 55 60

Asn Gln Pro Val Tyr Asn Gln Pro Val Tyr Asn Gln Pro Val Gly Ala  
65 70 75 80

Ala Gly Val Pro Trp Met Pro Ala Pro Gln Pro Pro Leu Asn Cys Pro  
85 90 95

Pro Gly Leu Glu Tyr Leu Ser Gln Ile Asp Gln Ile Leu Ile His Gln  
100 105 110

Gln Ile Glu Leu Leu Glu Val Leu Thr Gly Phe Glu Thr Asn Asn Lys  
115 120 125

Tyr Glu Ile Lys Asn Ser Phe Gly Gln Arg Val Tyr Phe Ala Ala Glu  
130 135 140

Asp Thr Asp Cys Cys Thr Arg Asn Cys Cys Gly Pro Ser Arg Pro Phe  
145 150 155 160

Thr Leu Arg Ile Ile Asp Asn Met Gly Gln Glu Val Ile Thr Leu Glu  
165 170 175

Arg Pro Leu Arg Cys Ser Ser Cys Cys Cys Pro Cys Cys Leu Gln Glu  
180 185 190

Ile Glu Ile Gln Ala Pro Pro Gly Val Pro Ile Gly Tyr Val Ile Gln  
195 200 205

Thr Trp His Pro Cys Leu Pro Lys Phe Thr Ile Gln Asn Glu Lys Arg  
210 215 220

Glu Asp Val Leu Lys Ile Ser Gly Pro Cys Val Val Cys Ser Cys Cys  
225 230 235 240

Gly Asp Val Asp Phe Glu Ile Lys Ser Leu Asp Glu Gln Cys Val Val  
245 250 255

Gly Lys Ile Ser Lys His Trp Thr Gly Ile Leu Arg Glu Ala Phe Thr  
260 265 270

Asp Ala Asp Asn Phe Gly Ile Gln Phe Pro Leu Asp Leu Asp Val Lys  
275 280 285

Met Lys Ala Val Met Ile Gly Ala Cys Phe Leu Ile Asp Phe Met Phe  
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<212> DNA

<213> Homo sapiens

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ccaggacgtc agcatgacta cctagtccca cctgctggca cagctggcat tcctgttcaa 300

aatcagccag gtagacctga aggggtacca tggatgccag caccaccacc accattaaac 360

tgtccgccag gattggaata cttaagtcag atagatatga tactaattca tcagcaaatt 420

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 <213> Homo sapiens

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 Glu Val Leu Phe Ser Phe Glu Ser Ser Asn Met Tyr Glu Ile Lys Asn  
 35 40 45  
 Ser Phe Gly Gln Arg Ile Tyr Phe Ala Ala Glu Asp Thr Asn Phe Cys  
 50 55 60  
 Ile Arg Asn Cys Cys Gly Arg Ser Arg Pro Phe Thr Leu Arg Ile Thr  
 65 70 75 80  
 Asp Asn Val Gly Arg Glu Val Ile Thr Leu Glu Arg Pro Leu Arg Cys  
 85 90 95  
 Asn Cys Cys Cys Cys Pro Cys Cys Leu Gln Glu Ile Glu Ile Gln Ala  
 100 105 110  
 Pro Pro Gly Val Pro Val Gly Tyr Val Thr Gln Thr Trp His Pro Cys

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115	120	125
Leu Thr Lys Phe Thr Ile Lys Asn Gln Lys Arg Glu Asp Val Leu Lys		
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Ile Ser Gly Pro Cys Ile Val Cys Ser Cys Ile Ala Gly Val Asp Phe		
145	150	155
Glu Ile Thr Ser Leu Asp Glu Gln Ile Val Val Gly Arg Ile Ser Lys		
165	170	175
His Trp Ser Gly Phe Leu Arg Glu Ala Phe Thr Asp Ala Asp Asn Phe		
180	185	190
Gly Ile Gln Phe Pro Arg Asp Leu Asp Val Lys Met Lys Ala Val Met		
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Ile Gly Ala Cys Phe Leu Ile Asp Tyr Met Phe Phe Glu Arg Thr Arg		
210	215	220

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0982347-031301

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 <212> PRT  
 <213> Homo sapiens

<400> 6

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 35 40 45  
 Phe Ala Leu Phe Pro Ser Pro Gly Pro Val Ala Leu Gly Ser Ala Ala  
 50 55 60  
 Pro Phe Leu Pro Leu Pro Gly Val Pro Ser Gly Leu Glu Phe Leu Val  
 65 70 75 80  
 Gln Ile Asp Gln Ile Leu Ile His Gln Lys Ala Glu Arg Val Glu Thr  
 85 90 95  
 Phe Leu Gly Trp Glu Thr Cys Asn Arg Tyr Glu Leu Arg Ser Gly Ala  
 100 105 110  
 Gly Gln Pro Leu Gly Gln Ala Ala Glu Glu Ser Asn Cys Cys Ala Arg  
 115 120 125  
 Leu Cys Cys Gly Ala Arg Arg Pro Leu Arg Val Arg Leu Ala Asp Pro  
 130 135 140  
 Gly Asp Arg Glu Val Leu Arg Leu Leu Arg Pro Leu His Cys Gly Cys  
 145 150 155 160  
 Ser Cys Cys Pro Cys Gly Leu Gln Glu Met Glu Val Gln Ala Pro Pro  
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09823347-081307

Gly Thr Thr Ile Gly His Val Leu Gln Thr Trp His Pro Phe Leu Pro  
 180 185 190  
 Lys Phe Ser Ile Gln Asp Ala Asp Arg Gln Thr Val Leu Arg Val Val  
 195 200 205  
 Gly Pro Cys Trp Thr Cys Gly Cys Gly Thr Asp Thr Asn Phe Glu Val  
 210 215 220  
 Lys Thr Arg Asp Glu Ser Arg Ser Val Gly Arg Ile Ser Lys Gln Trp  
 225 230 235 240  
 Gly Gly Leu Val Arg Glu Ala Leu Thr Asp Ala Asp Asp Phe Gly Leu  
 245 250 255  
 Gln Phe Pro Leu Asp Leu Asp Val Arg Val Lys Ala Val Leu Leu Gly  
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 <212> DNA  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Pro Thr Gly Tyr Pro Gly Gly Leu Pro Met Gly Tyr Tyr Ser Pro Gln  
 50 55 60  
 Gln Pro Ser Thr Phe Pro Leu Tyr Gln Pro Val Gly Gly Ile His Pro  
 65 70 75 80  
 Val Arg Tyr Gln Pro Gly Lys Tyr Pro Met Pro Asn Gln Ser Val Pro  
 85 90 95  
 Ile Thr Trp Met Pro Gly Pro Thr Pro Met Ala Asn Cys Pro Pro Gly  
 100 105 110  
 Leu Glu Tyr Leu Val Gln Leu Asp Asn Ile His Val Leu Gln His Phe  
 115 120 125  
 Glu Pro Leu Glu Met Met Thr Cys Phe Glu Thr Asn Asn Arg Tyr Asp  
 130 135 140  
 Ile Lys Asn Asn Ser Asp Gln Met Val Tyr Val Val Thr Glu Asp Thr  
 145 150 155 160  
 Asp Asp Phe Thr Arg Asn Ala Tyr Arg Thr Leu Arg Pro Phe Val Leu  
 165 170 175  
 Arg Val Thr Asp Cys Met Gly Arg Glu Ile Met Thr Met Gln Arg Pro  
 180 185 190

09823647-031301

Phe Arg Cys Thr Cys Cys Cys Phe Cys Cys Pro Ser Ala Arg Gln Glu  
 195 200 205  
 Leu Glu Val Gln Cys Pro Pro Gly Val Thr Ile Gly Phe Val Ala Glu  
 210 215 220  
 His Trp Asn Leu Cys Arg Ala Val Tyr Ser Ile Gln Asn Glu Lys Lys  
 225 230 235 240  
 Glu Asn Val Met Arg Val Arg Gly Pro Cys Ser Thr Tyr Gly Cys Gly  
 245 250 255  
 Ser Asp Ser Val Phe Glu Val Lys Ser Leu Asp Gly Ile Ser Asn Ile  
 260 265 270  
 Gly Ser Ile Ile Arg Lys Trp Asn Gly Leu Leu Ser Ala Met Ala Asp  
 275 280 285  
 Ala Asp His Phe Asp Ile His Phe Pro Leu Asp Leu Asp Val Lys Met  
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 Lys Ala Met Ile Phe Gly Ala Cys Phe Leu Ile Asp Phe Met Tyr Phe  
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<210> 10  
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<212> PRT  
<213> Mus musculus

<400> 10

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35 40 45  
Pro Pro Gly Pro Tyr Pro Gly Pro Gln Pro Gly Tyr Pro Val Pro Pro  
50 55 60  
Gly Gly Tyr Ala Gly Gly Gly Pro Ser Gly Phe Pro Val Gln Asn Gln  
65 70 75 80  
Pro Ala Tyr Asn His Pro Gly Gly Pro Gly Gly Thr Pro Trp Met Pro  
85 90 95  
Ala Pro Pro Pro Pro Leu Asn Cys Pro Pro Gly Leu Glu Tyr Leu Ala  
100 105 110  
Gln Ile Asp Gln Leu Leu Val His Gln Gln Ile Glu Leu Leu Glu Val  
115 120 125  
Leu Thr Gly Phe Glu Thr Asn Asn Lys Tyr Glu Ile Lys Asn Ser Leu  
130 135 140  
Gly Gln Arg Val Tyr Phe Ala Val Glu Asp Thr Asp Cys Cys Thr Arg  
145 150 155 160

09823847-031301

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<210>    11  
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<212>    DNA  
<213>    Mus musculus
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agtcgctgct ggtgctagga ttctaggaat tcgcctcact tggagctgca tgagaaaaga      180  
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agtatcctcc agcagcagtc caaggacctc cagagcatac tggacgcccc acattccaga      300  
ctaactacca agttccccag tctgggttatc caggacctca ggctagctac acagtctcaa      360  
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tccttgcaaa cactcagtggt atgccagcac caccacctat tctgaactgc ccacctgggc      480  
tagaatactt aaatcagata gatcagcttc tgattcatca gcaagttgaa cttctagaag      540  
tcttaacagg ctttgaaaca aataacaaat ttgaaatcaa gaacagcctc gggcagatgg      600  
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<400> 12

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 35 40 45  
 Pro Gln Ala Ser Tyr Thr Val Ser Thr Ser Gly His Glu Gly Tyr Ala  
 50 55 60  
 Ala Thr Arg Leu Pro Ile Gln Asn Asn Gln Thr Ile Val Leu Ala Asn  
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 Thr Gln Trp Met Pro Ala Pro Pro Pro Ile Leu Asn Cys Pro Pro Gly  
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09823847 "081301"

Leu Glu Tyr Leu Asn Gln Ile Asp Gln Leu Leu Ile His Gln Gln Val  
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 Asp Cys Cys Thr Arg Asn Cys Cys Glu Ala Ser Arg Pro Phe Thr Leu  
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 Arg Ile Leu Asp His Leu Gly Gln Glu Val Met Thr Leu Glu Arg Pro  
 165 170 175  
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 Ile Gln Ala Pro Pro Gly Val Pro Ile Gly Tyr Val Thr Gln Thr Trp  
 195 200 205  
 His Pro Cys Leu Pro Lys Leu Thr Leu Gln Asn Asp Lys Arg Glu Asn  
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 Val Leu Lys Val Val Gly Pro Cys Val Ala Cys Thr Cys Cys Ser Asp  
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00333847-081301

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<400> 14

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60



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 <212> PRT  
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<400> 16

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 His Trp Asn Leu Cys Arg Ala Ser Tyr Ser Ile Gln Asn Glu Lys Lys  
 65 70 75 80  
 Glu Ser Met Met Arg Val Arg Gly Pro Cys Ala Thr Tyr Gly Cys Gly  
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 Ser Asp Ser Val Phe Glu Ile Asn Ser Leu Asp Gly Val Ser Asn Ile  
 100 105 110  
 Gly Ser Ile Ile Arg Lys Trp Asn Gly Phe Leu Ser Thr Met Val Asn  
 115 120 125  
 Ala Asp His Phe Glu Ile Arg Phe Pro Leu Ala Leu Asp Val Lys Met  
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<210> 17  
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<400> 17  
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09823847 081301

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<210> 18  
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<220>  
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<400> 18  
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<210> 19  
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 <212> DNA  
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<400> 19  
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<210> 20  
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<210> 21  
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<223> T7 promoter sequence contained in reverse primer

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<210> 24

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<223> HuPLSCR1 CCAAT box

<400> 25

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<210> 26

<211> 16

<212> DNA

<213> Artificial sequence

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<223> Human Scramblase Splice donor site 1

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<223> Human Scramblase Splice donor site 4

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<220>  
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<220>  
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<220>  
<223> Human Scramblase Splice acceptor site 6

<400> 37

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<210> 38  
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<220>  
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<210> 39  
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<210> 43

09823847.081301

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<400> 44  
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